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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/685,892	10/16/2003	Bily Wang	Harvatek 9233	5918

7590 06/28/2006

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Silver Spring, MD 20903

EXAMINER	
WU, XIAO MIN	

ART UNIT	PAPER NUMBER
2629	

DATE MAILED: 06/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/685,892	WANG ET AL.	
	Examiner	Art Unit	
	XIAO M. WU	2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 October 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 and 2* is/are rejected.

7)☒ Claim(s) *3 and 4* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's admitted prior art (Fig. 1) in view of Safavi et al. (US Pub. No. 2004/0123501)

As to claim 1, the Fig. 1of he admitted prior art discloses a light emitting diode (LED) display panel, comprising: more than one circuit board (101, 102, 103), butting against each other, each mounted with a LED matrix array on the top side of said circuit board (see Fig. 1). It is noted that the prior art (Fig. 1) does not disclose an L-shaped bracket mounted at the bottom side of each said circuit board and aligned with a butting edge of said circuit board, having a vertical wall facing another said vertical wall of an adjacent circuit board, and a horizontal bottom attached to the bottom side of the circuit board by screws; and a clamp straggling over two butting said vertical walls of adjacent said brackets to tighten the contact between adjacent said circuit boards. Safavi is cited to teach a modular display panel device. As shown in Fig. 6, Safavi discloses a L-shaped bracket (62) mounted at the bottom side of the display panel (44) and aligned with a butting edge of panel, having a horizontal bottom (62) attached to the bottom of the panel (44). Safavi further discloses a clamp (54) struggling over two butting the vertical walls of adjacent brackets to tighten the contact between adjacent display panels. It would have been obvious to one of ordinary skill in the art to have modified he admitted prior art with the

features of using two L-shaped bracket against each other for securing the two adjacent panel as taught by Safavi so that the two adjacent panel is not only secured by the bottom screwed as taught in the prior art but also secured on the edge of the two adjacent panel. Therefore, the adjacent panels can be more secured connected together.

As to claim 2, Safavi discloses a set screw (54) inserted at the vertical jaw of said clamp to tighten the two adjacent circuit boards butting against each other (see Fig. 6).

Allowable Subject Matter

3. Claims 3 and 4 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: none of the prior art references alone or in combination teaches or fairly suggest the limitation of " a second set screw on top of the clamp to align the adjacent said circuit boards vertically", as recited in claim 3, and the limitation of a set screw on top of the clamp to align the adjacent said circuit boards vertically" as recited in claim 4.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The US 3,866,364, 5,600,910, 5,971,174, 5,995,179, 6,054,968, 6,474,901, 6,741,222 and 6,677,918 are cited to teach a modular device.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to XIAO M. WU whose telephone number is 571-272-7761. The examiner can normally be reached on 6:30 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, RICHARD HJERPE, can be reached on 571-272-7691. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

x.w.
June 23, 2006

XIAO M. WU
Primary Examiner
Art Unit 2629